# **Cedar River Instream Flow Commission**

#### Final Minutes

## **SPU Water Quality Lab**

April 2<sup>nd</sup>, 2014

### **Organizations/Members Present:**

- Seattle Public Utilities -- Tom Fox, Rand Little, Karl Burton
- Seattle City Light Liz Ablow
- Washington Department of Fish and Wildlife -- Peggy Miller
- NOAA Fisheries -- Randy McIntosh
- US Fish and Wildlife Service -- Tim Romanski
- Army Corps of Engineers -- Ken Brettmann, Scott Pozarycki, Chris Behrens
- Washington Department of Ecology -- Kellie Arthur
- Muckleshoot Indian Tribe -- Holly Coccoli
- **I. Call to Order:** Tom called the meeting to order at 9:42 AM.
- **II. Approval of Agenda:** Approved as presented.
- **III. Approval of Draft Minutes:** Approved as presented.
- IV. News and Notes: Buck is busy doing search and rescue work at the Oso landslide near Darrington. Randy mentioned that a recent court decision regarding hatchery plantings in the Elwha River is not the final determination in the case and will not necessarily prevent hatchery steelhead plantings in the Elwha.

#### V. Real Time Water Management:

*Hydrologic Conditions:* Currently, the Central Puget Sound Region has 99% of average snowpack for this time of year. The Cedar Basin has 88% of normal snowpack and the Tolt Basin is at 104% of normal. Substantial snowmelt is expected in the next week with warmer weather expected. The month of March was the wettest on record for SeaTac and Howard Hanson Dam. March was the 2<sup>nd</sup> wettest on record for the Cedar Basin with 20.6" of precipitation at Cedar Falls. March was the 30<sup>th</sup> wettest of any month in the record including the normal peak flow months (i.e. November and December). In early March there was a peak flow event that reached approximately 4,400 cfs at the USGS Renton gage. Prior to the event, the snowpack had recovered

somewhat, but the reservoir was a bit higher than normal to reserve water to protect Chinook redds that were vulnerable to dewatering. SPU increased releases before the storm but after 5 days of high rain volumes, the reservoir elevation increased and eventually reached the service spillway and involuntary spill was realized on March 9th. After the storm, water was released to restore the flood pocket and yesterday, SPU closed the service spillway and started refill with the reservoir at approximately elevation 1553.5°. Currently, inflows to the reservoir are above the 90 percentile. In the first half of March, estimated regulated flows exceeded actual flows on most days because SPU was storing water to prevent against an even larger flow event. In the second week of March, actual flows exceeded estimated unregulated flows on most days as water was being released to bring the reservoir elevation back down.

The estimated peak unregulated flow at Renton during the early March peak flow event would have been about 7500 cfs. When flows peaked, approximately 90% of Chinook fry had completed emergence whereas fully emerged sockeye redds may have only reached approximately 50% of total sockeye redds. Tim asked which tribs contribute the most flow volume below Masonry Dam. Tom responded that Upper Taylor Creek contributes the most but the tributaries below Landsburg (Lower Taylor, Lower Rock, Peterson, etc.) and local runoff also contribute substantially to accretion flows between Masonry Dam and Renton.

Liz reported that downramping requirements had been successfully met during the month of March. Water demand was approximately 100 MGD over the last month and cumulative diversions are well below the allowable levels in the City/Muckleshoot Agreement.

*Lake Washington*: Ken reported that the Corps began refill on February 15<sup>th</sup> when the lake elevation was 20.5'. Currently, the lake elevation is 21.33' and rising. The Corps expects the lake to be just below 22' on the 1<sup>st</sup> of May and 22' (full) by late May or early June depending on runoff. Smolt flumes will be deployed in the 3<sup>rd</sup> week of April. Ken said that the lake cannot be filled above 22' due to electrical issues at the locks and infrastructure issues with the lake bridges and landowners along the lakeshore.

Fish Update: Nearly all Chinook redds were fully protected from dewatering. The few that were not fully protected were only dewatered on the very top of the redd mound, which was typically less than 2% of the redd surface area. Karl said that he thought it was unlikely that many alevins were impacted given that less than 1% of the Chinook redds experienced slight dewatering and that alevins in those redds would have been able to exit the redd from the vast majority of their redds surface area that remained submerged. Karl expects to perform the 1<sup>st</sup> trout/steelhead redd survey on April 4<sup>th</sup> with WDFW staff.

*Army Corps Challenge Grant Discussion*: Scott gave a Power Point presentation detailing the historic fisheries studies that documented the historic studies regarding entrainment and injury of juvenile salmonids during lockages.

## VI. Supplemental Studies:

## Peak Flow Adaptive Management Study Phase II

Topic 1 – Karl reported that the current scour threshold (2,200 cfs Renton) had been exceeded in March and the accelerometer arrays would be removed this summer. The WCC has reserved 3 weeks in August for the work to retrieve the arrays. Karl is working to finalize the contract for the work. The contract should be done well before the work is scheduled.

Topic 2 – Off Channel Habitat Inventory and Peak Flow Assessment Rand said that he and Karl would re-survey the river to see whether the recent peak flows had changed any of the features identified in the last survey or added any additional features.

Topic 3 – Rand reported that USGS crews would be working in the field next week in an effort to characterize the geomorphic succession study reach.

#### VII. May 7 IFC Meeting:

1) Further discussion of the proposal to fund design for the Stoney Gate valves replacement.

#### VIII. Meeting adjourned at 12:30 PM